IN THE CLAIMS:

1.   (currently amended) A method of operating a base station to transmit communications to a plurality of user terminals on a plurality of carriers, the method comprising:

for each of the plurality of carriers, receiving channel quality indications from the plurality of user terminals;

5   based upon the channel quality indications received from the plurality of user terminals, for each of the plurality of carriers, determining a maximum data rate supportable for each of the user terminals;

based upon the maximum data rate supportable for each of the user terminals for each of the plurality of carriers, and a minimum quality of service required for each user terminal, allocating

10   frames in a plurality of superframes corresponding to the plurality of carriers in a subsequent communication to the plurality of user terminals; and

transmitting the subsequent communication to the plurality of user terminals based upon the allocation of frames; and

wherein the plurality of superframes are transmitted on the plurality of carriers and are

15   synchronized in time.

2.   (original) The method of claim 1, further comprising allocating the plurality of frames to the plurality of user terminals in order to maximize throughput based upon the constraints of service criteria.

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3.   (original) The method of claim 2, wherein the service criteria are based upon user terminal subscription levels.

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4.   (original) The method of claim 2, wherein the service criteria is based upon fairness in resource allocation.

5.   (original) The method of claim 1, wherein the subsequent communication includes both voice communications and data communications.

6.   (original) The method of claim 1, wherein the base station transmits voice communications and the data communications on separate carriers.

7.   (original) The method of claim 5, wherein successive packets of a data communication are carried on separate carriers.

8.   (original) The method of claim 5, wherein successive packets of a voice communication are carried on separate carriers.

9.   (currently amended) The method of claim 1, wherein:

the subsequent communication includes a packet that each superframe includes a plurality of frames and that is transmitted on one carrier of the plurality of carriers; and

the packet a frame of the plurality of frames includes a preamble that indicates the contents of the frame packet.

10.   (currently amended) The method of claim 9 1, wherein the base station transmits packets superframes at a frequency that meets a voice communication rate requirement.

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11.   (currently amended) The method of claim ~~9~~ 1, further comprising coding ~~the~~ ~~packet~~ at least one superframe with a plurality of Walsh codes prior to its transmission.

12.   (currently amended) The method of claim ~~9~~ 1, wherein ~~the packet~~ at least one superframe supports both voice communications and data communications.

13.   (currently amended) The method of claim ~~9~~ 1, wherein ~~the packet~~ each superframe includes a plurality of frames and each frame includes:

a pilot signal; and

a plurality of reverse link power control bits intended for the plurality of user terminals.

14.   (currently amended) The method of claim 9, wherein the preamble further indicates that the ~~packet~~ frame carries a voice communication.

15.   (currently amended) The method of claim 9, wherein the preamble further indicates that the ~~packet~~ frame carries a data communication.

16.   (currently amended) The method of claim 9, wherein:

the preamble includes a user identifier field; and

the user identifier field identifies one or more user terminals for which the ~~packet~~ frame is intended.

17.   (currently amended) The method of claim 9, wherein:

the preamble includes an explicit data rate indicator and an identifier;

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the explicit data rate indicator indicates a data rate of the ~~packet~~ <u>frame</u>; and

~~an~~ <u>the</u> identifier ~~that~~ identifies one or more user terminals for which the ~~packet~~ <u>frame</u> is intended.

5   18.   (original) The method of claim 1, further comprising assigning communications for a particular user terminal on a carrier having a best channel quality indication.

19.   (currently amended) The method of claim 1, wherein ~~the subsequent transmission is~~ a <u>superframe of the plurality of</u> superframes ~~that~~ support<u>s</u> both voice communications and data

10   communications, and the method further comprises:

encoding the data communications of the superframe using a first coding algorithm; and

encoding the voice communications of the superframe using a second coding algorithm that is different from the first coding algorithm.

15   20.   (currently amended) The method of claim 1, <u>wherein the plurality of superframes are time-aligned when transmitted on the plurality of carriers.</u>

~~wherein superframes are transmitted on the plurality of carriers and are synchronized in time.~~

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21.   (currently amended) A method of operating a user terminal within a wireless communication system to receive communications on a plurality of carriers, the method comprising:

receiving a plurality of pilot signals, wherein each pilot signal corresponds to a carrier of

5   the plurality of carriers;

determining a plurality of channel quality indications, wherein each channel quality indication corresponds to one of the plurality of carriers;

reporting the plurality of channel quality indications to a serving base station; and

receiving a communication in a superframe on at least one on a corresponding carrier of the

10   plurality of carriers that satisfies a minimum quality of service required for the user terminal, wherein receiving the communication includes decoding the superframe with a plurality of Walsh codes.

22.   (original) The method of claim 21, wherein the communication includes both a voice

15   communication and a data communication.

23.   (currently amended) The method of claim 22, further comprising:

receiving a voice communication in a frame of a superframe on a first carrier of the plurality of carriers; and

20   receiving a data communication in a frame of a superframe on a second carrier of the plurality of carriers.

wherein the voice communication and the data communication are received on separate carriers.

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24.   (original) The method of claim 22, wherein the voice communication and the data communication are received on a common carrier.

25.   (currently amended) The method of claim 21, <u>wherein the plurality of</u>
5   <u>superframes carried by the plurality of carriers arrive synchronized in time.</u>

~~further comprising decoding the packet with a plurality of Walsh codes.~~

26.   (currently amended) The method of claim 21, wherein:

the communication is received in a ~~packet~~ <u>a frame of a superframe</u> that includes a plurality
10   of frames and that is transmitted on one carrier of the plurality of carriers; and

the ~~packet~~ <u>frame</u> includes a preamble that indicates the contents of the packet.

27.   (currently amended) The method of claim 26, wherein:

data communications received in the ~~packet~~ <u>superframe</u> are encoded using a first coding
15   algorithm; and

voice communications received in the ~~packet~~ <u>superframe</u> are encoded using a second
coding algorithm that is different from the first coding algorithm.

28.   (original) The method of claim 21, further comprising receiving communications
20   on a carrier having a best channel quality.

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29.   (currently amended) A base station that transmits communications to a plurality of

user terminals on a plurality of carriers, the base station comprising:

an antenna;

a Radio Frequency unit coupled to the antenna; and

5   at least one digital processor coupled to the Radio Frequency unit that executes software

instructions causing the base station to:

for each of the plurality of carriers, receive channel quality indications from the plurality of

user terminals;

based upon the channel quality indications received from the plurality of user terminals, for

10   each of the plurality of carriers, determine a maximum data rate supportable for each of the user

terminals;

based upon the maximum data rate supportable for each of the user terminals for each of the

plurality of carriers, and a minimum quality of service required for each user terminal, allocate

frames in a plurality of superframes corresponding to the plurality of carriers in a subsequent

15   communication to the plurality of user terminals; and

transmit the subsequent communication to the plurality of user terminals based upon the

allocation of frames; and

wherein the plurality of superframes are transmitted on the plurality of carriers and are

synchronized in time.

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30.   (currently amended) A user terminal that operates to wirelessly receive communications on a plurality of carriers, the user terminal comprising:

an antenna;

a Radio Frequency unit coupled to the antenna; and

5   a digital -processor coupled to the Radio Frequency unit that executes software instructions causing the user terminal to:

receive a plurality of pilot signals, wherein each pilot signal corresponds to a carrier of the plurality of carriers;

determine a plurality of channel quality indications, wherein each channel quality

10   indication corresponds to one of the plurality of carriers;

report the plurality of channel quality indications to a serving base station; and

receive a communication in a superframe on at least one on a corresponding carrier of the plurality of carriers that satisfies a minimum quality of service required for the user terminal, wherein receiving the communication includes decoding the superframe with a plurality of Walsh

15   codes.

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31.   (currently amended) A plurality of software instructions stored on a media that, upon execution by a base station, cause the base station to transmit communications to a plurality of user terminals on a plurality of carriers, the plurality of software instructions comprising:

a set of instructions executed by the base station that cause the base station to, for each of

5   the plurality of carriers, receive channel quality indications from the plurality of user terminals;

a set of instructions executed by the base station that cause the base station to, based upon the channel quality indications received from the plurality of user terminals, for each of the plurality of carriers, determine a maximum data rate supportable for each of the user terminals;

a set of instructions executed by the base station that cause the base station to, based upon

10   the maximum data rate supportable for each of the user terminals for each of the plurality of carriers, and a minimum quality of service required for each user terminal, allocate frames in a plurality of superframes corresponding to the plurality of carriers in a subsequent communication to the plurality of user terminals; and

a set of instructions executed by the base station that cause the base station to, transmit

15   the subsequent communication to the plurality of user terminals based upon the allocation of frames such that the plurality of superframes are transmitted on the plurality of carriers and are synchronized in time.

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32.   (currently amended) A plurality of software instructions stored on a media that, upon execution by a user terminal, cause the user terminal to wirelessly receive communications on a plurality of carriers, the plurality of software instructions comprising:

a set of instructions executed by the user terminal that cause the user terminal to receive a

5   plurality of pilot signals, wherein each pilot signal corresponds to a carrier of the plurality of carriers;

a set of instructions executed by the user terminal that cause the user terminal to determine a plurality of channel quality indications, wherein each channel quality indication corresponds to one of the plurality of carriers;

10   a set of instructions executed by the user terminal that cause the user terminal to report the plurality of channel quality indications to a serving base station; and

a set of instructions executed by the user terminal that cause the user terminal to receive a communication in a superframe on at least one on a corresponding carrier of the plurality of carriers that satisfies a minimum quality of service required for the user terminal, wherein receiving the

15   communication includes decoding the superframe with a plurality of Walsh codes.

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